

## 2013 Wyoming Aerial Detection Survey Highlights

### Mountain Pine beetle

The mountain pine beetle epidemic has declined across Wyoming in 2013 with the exception of the Black Hills in the NE corner of the state. Statewide, the number of acres affected has declined from 180,000 in 2012 to 82,000 in 2013 (Figure 1). Since 1996, the total number of affected acres is over 3.4 million.

### Mountain Pine Beetle

- **South central Wyoming** (Medicine Bow National Forest and adjacent lands in Carbon, Albany, Converse, Natrona, Laramie and Platte counties) - This area has seen a decline of mountain pine beetle activity from 49,000 acres in 2012 to 4,800 in 2013 largely due to susceptible host depletion.
- **Western Wyoming** (Shoshone, Wasatch-Cache and Bridger Teton National Forests and adjacent lands in Lincoln, Sublette, Uinta, Fremont, Park and Teton counties) - Mountain pine beetle activity has declined from 122,000 acres in 2012 to 75,000 in 2013 in lodgepole and 5-needle pines largely due to susceptible host depletion.
- **North central Wyoming** (Bighorn National Forest and adjacent lands in Bighorn, Johnson, Sheridan and Washakie counties) - Large areas of forest remain unaffected by mountain pine beetle in this area. In 2013, 590 acres of mountain pine beetle activity was detected.
- **North east Wyoming-** (Black Hills National Forest and adjacent lands in Crook and Weston counties) Mountain pine beetle activity continues, and may be increasing locally. Aerial photograph interpretation detected 760 acres of mountain pine beetle activity in this area (Figure 2).

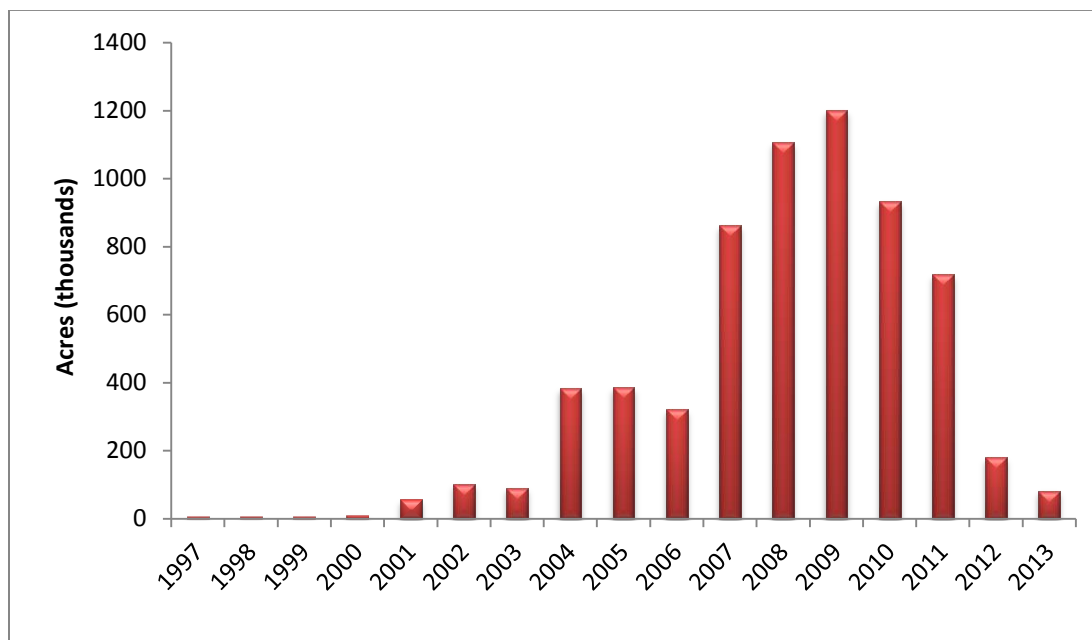
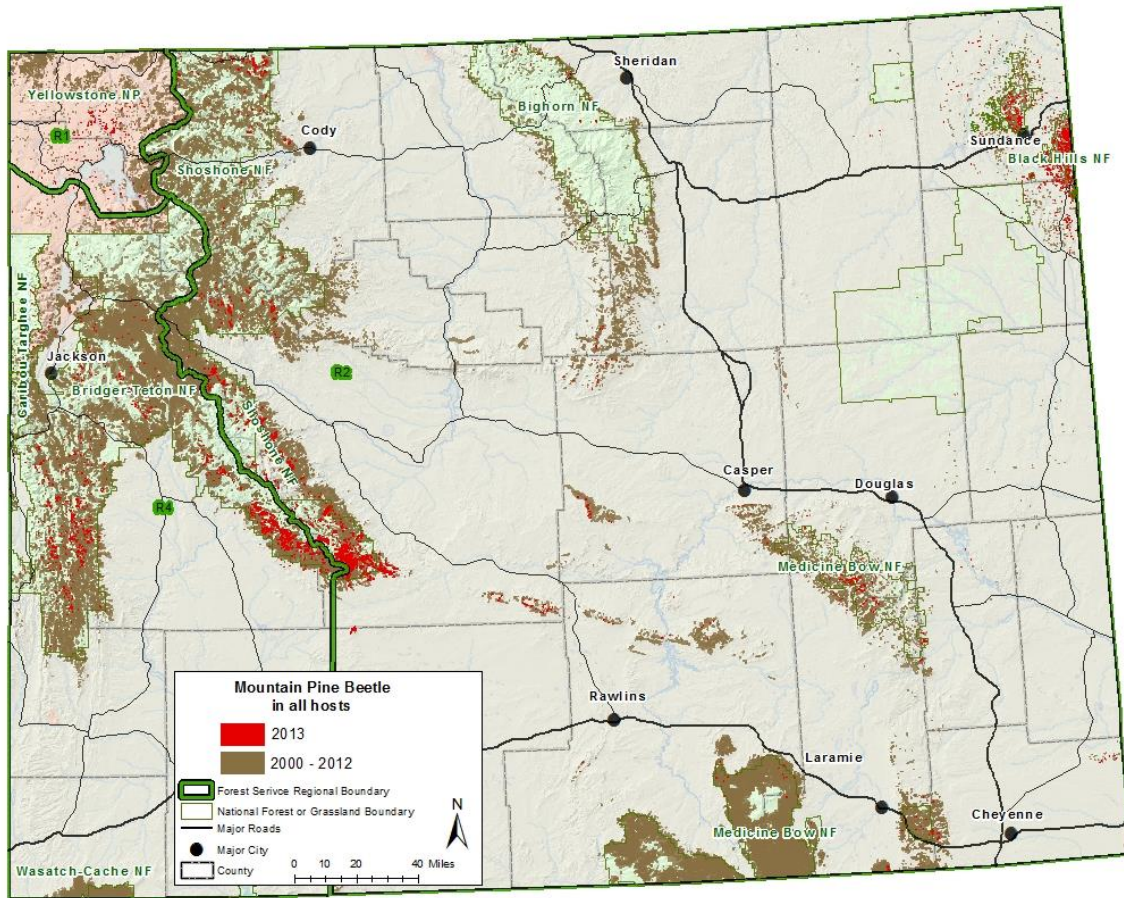


Figure 1. Annual Acres affected by mountain pine beetle in Wyoming.



**Figure 2. Mountain pine beetle activity in Wyoming 2000-2013**

### **Spruce Beetle**

Spruce beetle activity has remained relatively constant at 36,000 acres in 2013 after dropping from 76,000 in 2011 to 32,000 acres in 2012 statewide (Figure 3). Since 1996, 558,000 acres have been affected by spruce beetle statewide leaving many areas of large dead standing spruce in higher elevations.

In south central Wyoming, spruce beetle populations are declining leaving large areas of dead standing, large spruce in the Sierra Madre, Snowy Range, and Medicine Bow Mountains in Albany and Carbon Counties.

In northwestern Wyoming's Absaroka Mountains in and adjacent to the Shoshone National Forest, spruce beetle continues to kill spruce and many areas have few surviving mature spruce remaining. Spruce beetle activity is more localized and slightly increasing in portions of the Wind River Range.

In north central Wyoming spruce beetle caused tree mortality continues to be confined in localized areas in the northern Big Horn Mountains in Big Horn and Sheridan Counties (Figure 4).

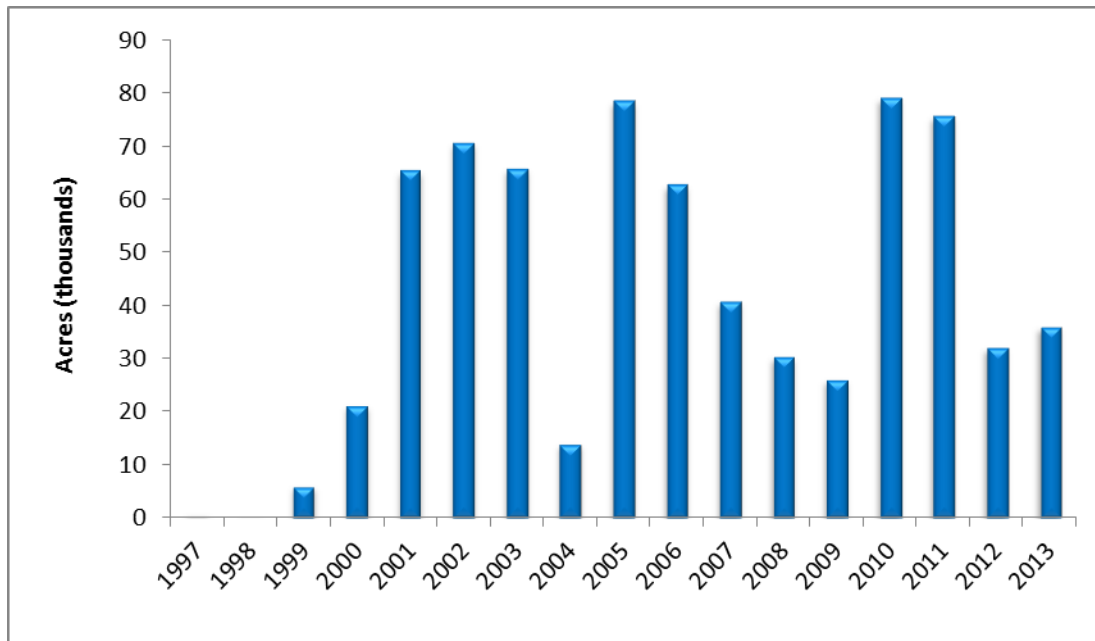


Figure 3. Annual acres affected by spruce beetle in Wyoming.

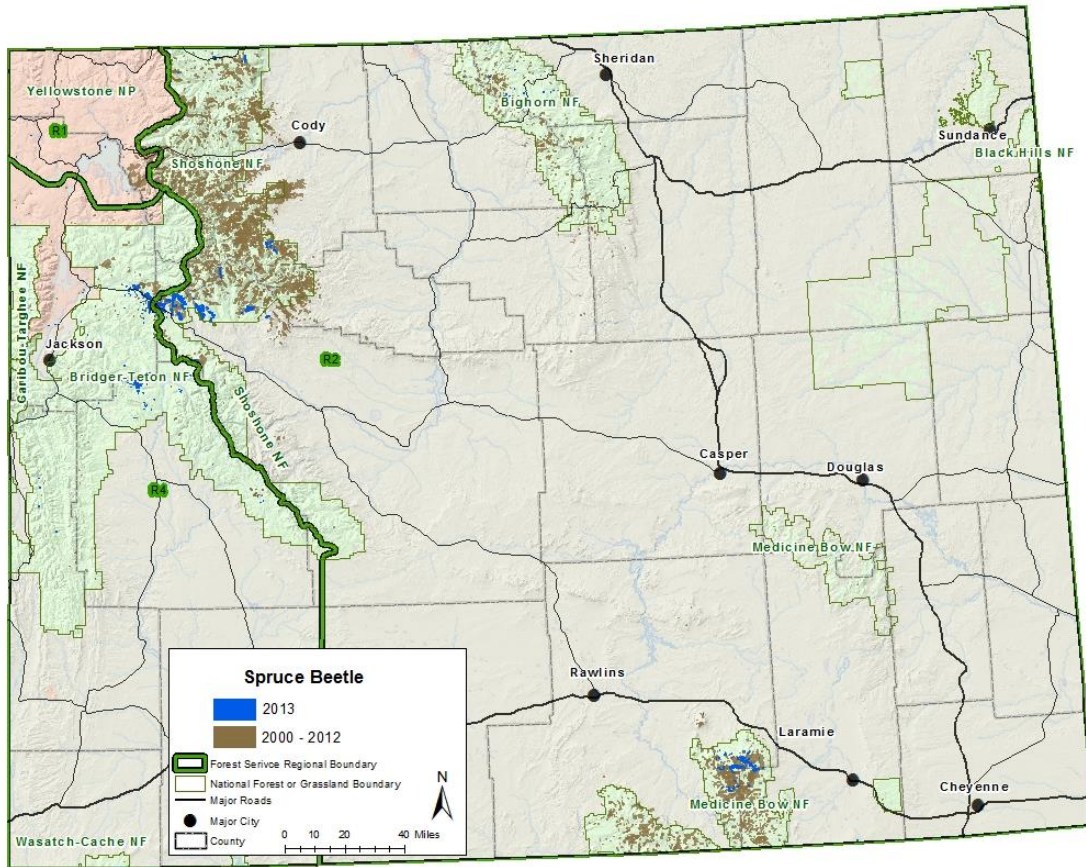


Figure 4. Spruce beetle activity in Wyoming 2000-2013.

### Douglas-fir Beetle

Tree mortality from Douglas-fir beetle was detected on over 400,000 acres primarily during the early and mid-2000's but it has remained at low levels for several years with only 1000 acres affected in 2013 (Figure 5). The largest area affected this year was 620 acres in southern Sweetwater County in the Tepee and Little Mountain area just north of the Colorado border.

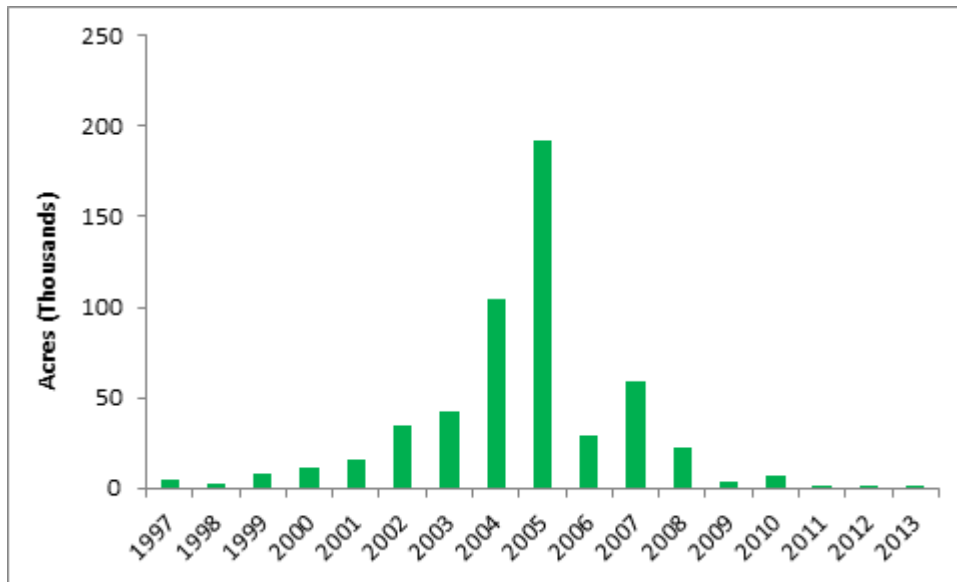


Figure 5. . Annual acres affected by Douglas-fir beetle in Wyoming.